

Analysing data from patient medical records to investigate whether a 18FDG-PET scan can predict survival in patients with breast cancer that can be treated with surgery

Submission date 09/05/2020	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 12/05/2020	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 14/06/2023	Condition category Cancer	<input checked="" type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Most cancers use more glucose (a type of sugar) than normal cells. FDG is a molecule that is taken up by cancer cells in the same way as glucose and can be visualised in a PET scan to show where there are tumours in the body. This technique is widely used to investigate whether breast cancer has spread to other areas of the body, but it is not clear whether it would also be useful in the early stages of breast cancer, when the cancer can still be treated with surgery alone.

This study will use medical records of patients diagnosed with breast cancer at a Brussels hospital in the years from 2002 to 2015. It will look at the FDG-PET imaging the patients received and how long they survived without cancer and in total to see if there are any patterns.

Who can participate?

There is no active participation in this study. Medical records of people treated 2002-2015 will be analysed.

What does the study involve?

The researchers will take information from medical records and FDG-PET scans. This information will be analysed to see if there are any links between certain FDG-PET results and whether patients were more or less likely to die from their breast cancer.

What are the possible benefits and risks of participating?

There are no potential risks or benefits to participants.

Where is the study run from?

Brussels University Hospital (Belgium)

When is the study starting and how long is it expected to run for?

July 2015 to January 2020

Who is funding the study?
The investigator is funding the costs of the study.

Who is the main contact?
Dr Vincent Vinh-Hung, vh@onco.be

Contact information

Type(s)
Scientific

Contact name
Dr Vincent Vinh-Hung

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Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number

ClinicalTrials.gov number
Nil known

Secondary identifying numbers
1.03

Study information

Scientific Title
Prognostic value of pre-treatment 18FDG-PET in operable breast cancer

Acronym
PET2015UZ

Study objectives
18FDG-PET is a significant predictor of outcome in breast cancer.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 21/10/2015, Commissie Medische Ethiek (O.G. 016) Universitair Ziekenhuis Brussel [Brussels University Hospital Medical Ethics Committee] (Reflectiegroep Biomedische Ethiek, Laarbeeklaan 101, 1090 Brussels, Belgium; +32 2 477 55 84; commissie.ethiek@uzbrussel.be), ref: B.U.N. 143201525542

Study design

Single-centre retrospective observational study with longitudinal cohorts 2002-2008 and 2009-2015

Primary study design

Observational

Secondary study design

Longitudinal study

Study setting(s)

Hospital

Study type(s)

Diagnostic

Participant information sheet

No participant information sheet available

Health condition(s) or problem(s) studied

Operable breast cancer.

Interventions

Records of patients with breast cancer who received pre-operative 18FDG-PET scans will be included. The records will be anonymised and the following types of data extracted:

1. Clinical-pathological characteristics, including age at diagnosis, histological tumor type, pathological grade etc
2. FDG-PET characteristics, including PET positivity and standard uptake value (SUV) etc
3. Outcomes, including local and regional recurrence, disease status at last follow-up, cause of death etc
4. Dates, including date of histological diagnosis, date of recurrence etc

Intervention Type

Procedure/Surgery

Primary outcome measure

1. Overall survival up to 13 years after diagnosis assessed using patient medical records
2. Disease-free survival up to 13 years after diagnosis assessed using patient medical records

Secondary outcome measures

There are no secondary outcome measures

Overall study start date

22/07/2015

Completion date

31/01/2020

Eligibility

Key inclusion criteria

1. Patients treated at the UZ Brussel
2. Diagnosed in the period 2002-2015
3. Primary breast cancer
4. Histologically confirmed
5. Operable
6. Pre-treatment FDG-PET or PET/CT

Participant type(s)

Patient

Age group

Mixed

Sex

Both

Target number of participants

182

Key exclusion criteria

1. Previous history of cancer
2. Primary sarcoma of the breast
3. Palliative surgery for symptom control
4. No histopathological confirmation of cancer
5. Noninvasive carcinoma
6. Metastatic disease demonstrated by imaging modes other than FDG-PET

Date of first enrolment

01/01/2002

Date of final enrolment

31/12/2015

Locations

Countries of recruitment

Belgium

Study participating centre

Oncologisch Centrum, UZ Brussel
101 Laarbeeklaan
Jette
Belgium
1090

Sponsor information

Organisation

Universitair Ziekenhuis Brussel

Sponsor details

Laarbeeklaan 101
Brussel
Belgium
1090
+32 24776144
mark.deridder@uzbrussel.be

Sponsor type

Hospital/treatment centre

Website

<https://www.uzbrussel.be/en/web/oncologisch-centrum>

ROR

<https://ror.org/038f7y939>

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

Results and Publications

Publication and dissemination plan

End analyses and publication expected from June to December 2020.

Intention to publish date

30/12/2020

Individual participant data (IPD) sharing plan

The datasets generated at the analysis of the study will be made available upon request from the main contact, Vincent Vinh-Hung (vh@onco.be or anhxang@gmail.com), who will inform the UZ Brussel Ethics Committee.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file	version v1.03	22/07/2015	12/05/2020	No	No
Dataset		25/10/2021	14/06/2023	No	No
Results article		24/04/2022	14/06/2023	Yes	No
Results article		10/03/2021	14/06/2023	Yes	No